

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 07 March 2001 (07.03.01)	
International application No. PCT/GB00/02098	Applicant's or agent's file reference WPP80410
International filing date (day/month/year) 01 June 2000 (01.06.00)	Priority date (day/month/year) 01 June 1999 (01.06.99)
Applicant LAITT, Andrew	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
29 December 2000 (29.12.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer Zakaria EL KHODARY</p> <p>Telephone No.: (41-22) 338.83.38</p>
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference WPP80410	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 00/ 02098	International filing date (day/month/year) 01/06/2000	(Earliest) Priority Date (day/month/year) 01/06/1999
Applicant LAITT, Andrew		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 05 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

2

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 00/02098

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 21
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
Rule 6.2 (a) PCT
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 21

Rule 6.2 (a) PCT

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 00/02098

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65B9/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A Y	FR 2 658 785 A (SZILAGYI) 30 August 1991 (1991-08-30) the whole document ---	1, 3, 12, 22 20 7-11, 13-18
A Y	FR 2 646 140 A (ROUVRAIS) 26 October 1990 (1990-10-26) the whole document ---	1 14
Y	US 4 442 656 A (WYLIE) 17 April 1984 (1984-04-17) the whole document ---	7-11
Y	US 4 045 946 A (SCHAEFER) 6 September 1977 (1977-09-06) column 6, paragraph 4 -column 7, paragraph 2; figures 7,8 --- -/--	13



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

31 August 2000

Date of mailing of the international search report

03. 10. 2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Claeys, H

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/02098

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 220 771 A (BURNS) 22 June 1993 (1993-06-22) column 1, paragraph 2 ----	15
Y	US 4 018 029 A (HAYSEN) 19 April 1977 (1977-04-19) abstract column 3, paragraph 4 -column 5, paragraph 3; figures 3-6 ----	16
Y	WO 95 21092 A (WATKINS) 10 August 1995 (1995-08-10) page 7, paragraph 2 -page 9, paragraph 1; figures 1-3 ----	17,18
A	US 4 793 118 A (FERAG) 27 December 1988 (1988-12-27) abstract -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 00/02098

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
FR 2658785	A	30-08-1991	NONE		
FR 2646140	A	26-10-1990	NONE		
US 4442656	A	17-04-1984	NONE		
US 4045946	A	06-09-1977	US	3982374 A	28-09-1976
			CA	1052333 A	10-04-1979
			DE	2529024 A	22-01-1976
			FR	2276987 A	30-01-1976
			GB	1506036 A	05-04-1978
			IT	1040768 B	20-12-1979
			JP	51056392 A	18-05-1976
US 5220771	A	22-06-1993	NONE		
US 4018029	A	19-04-1977	DE	2645299 A	14-04-1977
			GB	1534742 A	06-12-1978
			IT	1089951 B	18-06-1985
WO 9521092	A	10-08-1995	AT	175164 T	15-01-1999
			AU	1542495 A	21-08-1995
			CA	2182189 A	10-08-1995
			DE	69507015 D	11-02-1999
			DE	69507015 T	15-07-1999
			EP	0749388 A	27-12-1996
			JP	9511201 T	11-11-1997
			US	5937614 A	17-08-1999
US 4793118	A	27-12-1988	CH	671003 A	31-07-1989
			DE	3786499 A	19-08-1993
			EP	0253960 A	27-01-1988
			JP	2681049 B	19-11-1997
			JP	63037084 A	17-02-1988

PATENT COOPERATION TREATY

PCT

REC'D 08 AUG 2001
WIPO PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference WPP80410	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/02098	International filing date (day/month/year) 01/06/2000	Priority date (day/month/year) 01/06/1999
International Patent Classification (IPC) or national classification and IPC B65B9/20		
Applicant LAITT, Andrew		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☐ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 29/12/2000	Date of completion of this report 06.08.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Janosch, J Telephone No. +49 89 2399 7525



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02098

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):
Description, pages:

1-7 as originally filed

Claims, No.:

1-22 as amended under Article 19

Drawings, sheets:

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02098

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 1-22.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 22 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 1-21.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The feature "the pouch dimensions are calculated such that each pouch can contain the desired quantity of food-stuff, as well as sufficient air to protect the food-stuff by cushioning" is an essential feature of claim 1. Since it was introduced, according to Art. 19 PCT, after the search report was established and since this feature was not covered by the originally filed claims, which were the basis for the search report, this feature was not taken into consideration by the ISA when establishing the International Search Report. Consequently claim 1 cannot be examined since it has not been searched (Rule 66.1 (e) PCT).

This is likewise relevant for claims 2-21, since these claims depend on claim 1.

2. Claim 22 is not clear in the sens of Art. 6 PCT, since the packaged brittle food-stuff is exclusively defined by method steps. Structural features are not used to define the subject-matter of claim 22.

Re Item VII

Certain defects in the international application

1. Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
2. The features of the claims 1-22 are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) WPP80410

Box No. I TITLE OF INVENTION

A method of packaging goods

Box No. II APPLICANT

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

Laitt, Andrew
22 Dempster Road
Wandsworth
London SW18 1AT
United Kingdom

☒ This person is also inventor.

Telephone No.

Facsimile No.

Teleprinter No.

State (that is, country) of nationality:
GBState (that is, country) of residence:
GBThis person is applicant
for the purposes of:☒ all designated
States☐ all designated States except
the United States of America☐ the United States
of America only☐ the States indicated in
the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

☐ applicant only☐ applicant and inventor☐ inventor only (If this check-box
is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant
for the purposes of:☐ all designated
States☐ all designated States except
the United States of America☐ the United States
of America only☐ the States indicated in
the Supplemental Box☐ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

Devons, David Jon
Marks & Clerk
57-60 Lincoln's Inn Fields
London WC2A 3LS
United Kingdom

Telephone No.

020-7400-3000

Facsimile No.

020-7404-4910

Teleprinter No.

25311 EMANDC G

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Sheet No. 2...

Box No.V DESIGNATION STATES

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

Regional Patent

- ☒ AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
- ☒ EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ EP European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line):

- | | |
|--|--|
| <input checked="" type="checkbox"/> AE United Arab Emirates | <input checked="" type="checkbox"/> LR Liberia |
| <input checked="" type="checkbox"/> AL Albania | <input checked="" type="checkbox"/> LS Lesotho |
| <input checked="" type="checkbox"/> AM Armenia | <input checked="" type="checkbox"/> LT Lithuania |
| <input checked="" type="checkbox"/> AT Austria | <input checked="" type="checkbox"/> LU Luxembourg |
| <input checked="" type="checkbox"/> AU Australia | <input checked="" type="checkbox"/> LV Latvia |
| <input checked="" type="checkbox"/> AZ Azerbaijan | <input checked="" type="checkbox"/> MA Morocco |
| <input checked="" type="checkbox"/> BA Bosnia and Herzegovina | <input checked="" type="checkbox"/> MD Republic of Moldova |
| <input checked="" type="checkbox"/> BB Barbados | <input checked="" type="checkbox"/> MG Madagascar |
| <input checked="" type="checkbox"/> BG Bulgaria | <input checked="" type="checkbox"/> MK The former Yugoslav Republic of Macedonia |
| <input checked="" type="checkbox"/> BR Brazil | |
| <input checked="" type="checkbox"/> BY Belarus | <input checked="" type="checkbox"/> MN Mongolia |
| <input checked="" type="checkbox"/> CA Canada | <input checked="" type="checkbox"/> MW Malawi |
| <input checked="" type="checkbox"/> CH and LI Switzerland and Liechtenstein | <input checked="" type="checkbox"/> MX Mexico |
| <input checked="" type="checkbox"/> CN China | <input checked="" type="checkbox"/> NO Norway |
| <input checked="" type="checkbox"/> CR Costa Rica | <input checked="" type="checkbox"/> NZ New Zealand |
| <input checked="" type="checkbox"/> CU Cuba | <input checked="" type="checkbox"/> PL Poland |
| <input checked="" type="checkbox"/> CZ Czech Republic | <input checked="" type="checkbox"/> PT Portugal |
| <input checked="" type="checkbox"/> DE Germany | <input checked="" type="checkbox"/> RO Romania |
| <input checked="" type="checkbox"/> DK Denmark | <input checked="" type="checkbox"/> RU Russian Federation |
| <input checked="" type="checkbox"/> DM Dominica | <input checked="" type="checkbox"/> SD Sudan |
| <input checked="" type="checkbox"/> EE Estonia | <input checked="" type="checkbox"/> SE Sweden |
| <input checked="" type="checkbox"/> ES Spain | <input checked="" type="checkbox"/> SG Singapore |
| <input checked="" type="checkbox"/> FI Finland | <input checked="" type="checkbox"/> SI Slovenia |
| <input checked="" type="checkbox"/> GB United Kingdom | <input checked="" type="checkbox"/> SK Slovakia |
| <input checked="" type="checkbox"/> GD Grenada | <input checked="" type="checkbox"/> SL Sierra Leone |
| <input checked="" type="checkbox"/> GE Georgia | <input checked="" type="checkbox"/> TJ Tajikistan |
| <input checked="" type="checkbox"/> GH Ghana | <input checked="" type="checkbox"/> TM Turkmenistan |
| <input checked="" type="checkbox"/> GM Gambia | <input checked="" type="checkbox"/> TR Turkey |
| <input checked="" type="checkbox"/> HR Croatia | <input checked="" type="checkbox"/> TT Trinidad and Tobago |
| <input checked="" type="checkbox"/> HU Hungary | <input checked="" type="checkbox"/> TZ United Republic of Tanzania |
| <input checked="" type="checkbox"/> ID Indonesia | <input checked="" type="checkbox"/> UA Ukraine |
| <input checked="" type="checkbox"/> IL Israel | <input checked="" type="checkbox"/> UG Uganda |
| <input checked="" type="checkbox"/> IN India | <input checked="" type="checkbox"/> US United States of America |
| <input checked="" type="checkbox"/> IS Iceland | |
| <input checked="" type="checkbox"/> JP Japan | <input checked="" type="checkbox"/> UZ Uzbekistan |
| <input checked="" type="checkbox"/> KE Kenya | <input checked="" type="checkbox"/> VN Viet Nam |
| <input checked="" type="checkbox"/> KG Kyrgyzstan | <input checked="" type="checkbox"/> YU Yugoslavia |
| <input checked="" type="checkbox"/> KP Democratic People's Republic of Korea | <input checked="" type="checkbox"/> ZA South Africa |
| | <input checked="" type="checkbox"/> ZW Zimbabwe |
- Check-boxes reserved for designating States which have become party to the PCT after issuance of this sheet:
- ☒ Plus any other PCT contracting state
- ☐ not listed above or on page 3

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Sheet No. ...3...

Supplemental Box*If the Supplemental Box is not used, this sheet should not be included in the request.*

1. If, in any of the Boxes, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No. ..." [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:
- (i) if more than two persons are involved as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;
 - (ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;
 - (iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;
 - (iv) if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;
 - (v) if, in Box No. V, the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "continuation" or "continuation-in-part": in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;
 - (vi) if, in Box No. VI, there are more than three earlier applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI;
 - (vii) if, in Box No. VI, the earlier application is an ARIPO application: in such case, write "Continuation of Box No. VI". specify the number of the item corresponding to that earlier application and indicate at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed.
2. If, with regard to the precautionary designation statement contained in Box No. V, the applicant wishes to exclude any State(s) from the scope of that statement: in such case, write "Designation(s) excluded from precautionary designation statement" and indicate the name or two-letter code of each State so excluded.
3. If the applicant claims, in respect of any designated Office, the benefits of provisions of the national law concerning non-prejudicial disclosures or exceptions to lack of novelty: in such case, write "Statement concerning non-prejudicial disclosures or exceptions to lack of novelty" and furnish that statement below.

Continuation of Box V - Designation of States

DZ - Algeria
 AG - Antigua & Barbuda
 MZ - Mozambique

Sheet No. 4

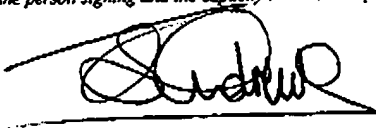
Box No. VI PRIORITY CLAIM		<input type="checkbox"/> Further priority claims are indicated in the Supplemental Box.		
Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application: regional Office	international application: receiving Office
item (1) 1 June 99 (01.06. 1999)	9912719.3	United Kingdom		
item (2)				
item (3)				

☒ The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s): 1

* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.

Box No. VII INTERNATIONAL SEARCHING AUTHORITY								
Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used): ISA /	Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority): <table style="width: 100%;"> <tr> <td style="width: 40%;">Date (day/month/year)</td> <td style="width: 20%;">Number</td> <td style="width: 40%;">Country (or regional Office)</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>		Date (day/month/year)	Number	Country (or regional Office)			
Date (day/month/year)	Number	Country (or regional Office)						

Box No. VIII CHECK LIST; LANGUAGE OF FILING	
This international application contains the following number of sheets: request : 4 description (excluding sequence listing part) : 7 claims : 3 abstract : 1 drawings : 5 sequence listing part of description : Total number of sheets : 20	This international application is accompanied by the item(s) marked below: 1. <input checked="" type="checkbox"/> fee calculation sheet 2. <input type="checkbox"/> separate signed power of attorney 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: 4. <input type="checkbox"/> statement explaining lack of signature 5. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): 6. <input type="checkbox"/> translation of international application into (language): 7. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material 8. <input type="checkbox"/> nucleotide and/or amino acid sequence listing in computer readable form 9. <input checked="" type="checkbox"/> other (specify): Form 23/77
Figure of the drawings which should accompany the abstract: 2	Language of filing of the international application: English

Box No. IX SIGNATURE OF APPLICANT OR AGENT	
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request). <div style="text-align: center;">  TS ANDREWS FOR Devons, David Jon </div>	

For receiving Office use only	
1. Date of actual receipt of the purported international application: 3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application: 4. Date of timely receipt of the required corrections under PCT Article 11(2): 5. International Searching Authority (if two or more are competent): ISA /	2. Drawings: <input type="checkbox"/> received: <input type="checkbox"/> not received: 6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid.

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Date of receipt of the record copy by the International Bureau:	

The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, with one chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line below:
 IPEA/ EP 29/12/2000

PCT

CHAPTER II

DEMAND

under Article 31 of the Patent Cooperation Treaty:
 The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only	
Identification of IPEA	Date of receipt of DEMAND
Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION	
Applicant's or agent's file reference WPP80410	
International application No. PCT/GB00/02098	International filing date (day/month/year) 1 JUNE 2000 (1/6/00)
(Earliest) Priority date (day/month/year) 1 JUNE 1999 (1/06/99)	
Title of invention A method of packaging goods	
Box No. II APPLICANT(S)	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) LAITT, Andrew 22 Dempster Road Wandsworth London SW18 1AT United Kingdom	Telephone No.: Facsimile No.: Teleprinter No.:
State (that is, country) of nationality: GB	State (that is, country) of residence: GB
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
State (that is, country) of nationality:	State (that is, country) of residence:
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
State (that is, country) of nationality:	State (that is, country) of residence:
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)	
State (that is, country) of nationality:	State (that is, country) of residence:
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.	

Sheet No. 2

International application No.
PCT/GB00/02098**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**The following person is ☒ agent ☐ common representativeand ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.Name and address: *(Family name followed by given name: for a legal entity, full official designation.
The address must include postal code and name of country.)*DEVONS, David Jon
Marks & Clerk
57-60 Lincoln's Inn Fields
London WC2A 3LS
United Kingdom

Telephone No.:

020-7400-3000

Facsimile No.:

020-7404-4910

Teleprinter No.:

25311 EMANDC G

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:***

1. The applicant wishes the international preliminary examination to start on the basis of:

☐ the international application as originally filed

the description

☐ as originally filed☐ as amended under Article 34

the claims

☐ as originally filed☒ as amended under Article 19 (together with any accompanying statement)☐ as amended under Article 34

the drawings

☐ as originally filed☐ as amended under Article 342. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). *(This check-box may be marked only where the time limit under Article 19 has not yet expired.)*

* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: ENGLISH☒ which is the language in which the international application was filed.☐ which is the language of a translation furnished for the purposes of international search.☐ which is the language of publication of the international application.☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.**Box No. V ELECTION OF STATES**The applicant hereby elects all eligible States *(that is, all States which have been designated and which are bound by Chapter II of the PCT)*

excluding the following States which the applicant wishes not to elect:

Sheet No. 3

International application No.

PCT/GB00/02098

Box No. VI CHECK LIST

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- | | | |
|--|-----|--------|
| 1. translation of international application | : | sheets |
| 2. amendments under Article 34 | : | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : 3 | sheets |
| 4. copy (or, where required, translation) of statement under Article 19 | : | sheets |
| 5. letter | : 1 | sheets |
| 6. other (specify) | : | sheets |

For International Preliminary
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received

not received

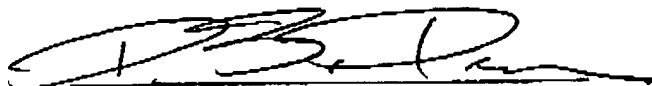
☐☐☐☐☐☐☐☐☐☐☐☐

The demand is also accompanied by the item(s) marked below:

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> fee calculation sheet | 4. <input type="checkbox"/> statement explaining lack of signature |
| 2. <input type="checkbox"/> separate signed power of attorney | 5. <input type="checkbox"/> nucleotide and or amino acid sequence listing in computer readable form |
| 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | 6. <input type="checkbox"/> other (specify): |

Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).



DEVONS, David Jon

For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.

☐ The applicant has been informed accordingly.

4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.

5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

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Demand received from IPEA on:

(12) INTERNATIONAL PUBLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/73149 A1

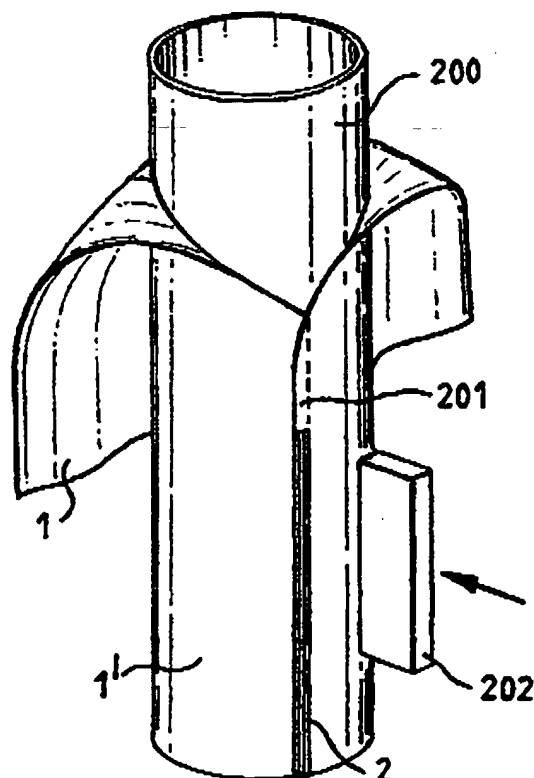
- (51) International Patent Classification⁷: **B65B 9/20**
- (21) International Application Number: **PCT/GB00/02098**
- (22) International Filing Date: **1 June 2000 (01.06.2000)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
9912719.3 **1 June 1999 (01.06.1999)** **GB**
- (71) Applicant and
(72) Inventor: **LAITT, Andrew [GB/GB]; 22 Dempster Road, London SW18 1AT (GB).**
- (74) Agent: **DEVONS, David, Jon; Marks & Clerk, 57-60 Lincoln's Inn Fields, London WC2A 3LS (GB).**

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:— *With international search report.**[Continued on next page]*

(54) Title: A METHOD OF PACKAGING GOODS



(57) Abstract: A method of packaging goods comprises the steps of forming a tube (1¹), forming a first seal (3) at a lower end of the tube (1¹), feeding a pre-determined amount of the goods to be packaged (204) into the tube (1¹), forming a second seal in the tube (1¹) at a pre-determined distance above the first seal (3), repeating the steps of feeding the goods and sealing along the tube (1¹) to form a strip of sealed pouches (7) containing the goods (204) and inserting the strip of sealed pouches (7) into a carton (8).

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- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A Method Of Packaging Goods

The present invention relates to a method of packaging goods, in particular packaging food-stuffs which remain fresh for a limited period only, such as breakfast cereals, crisps, biscuits and ground coffee.

Conventionally, food products such as breakfast cereals and the like are packaged in cartons which contain a sealed bag for holding a quantity of the breakfast cereal, usually in quantities of 125g to 1000g. Once the carton is opened and the factory seal of the bag is broken, the contents become stale and soft within a few weeks, or even sooner. Once stale the enjoyment of the crisp and fresh taste of the newly opened packet is lost. One solution to this is to supply individual 25g or 30g portion packs or any other suitable size of portion pack that may be desired. Portion packs comprise a bag containing an individual portion within an individual carton. This form of packaging is comparatively expensive compared with the larger cartons.

Furthermore, food products, in particular cereal flakes, at the bottom of the sealed bag tend to break or be crushed during filling of the bag and during transit, so that the last few portions of cereal in the bag become powder-like. This powder-like cereal is unattractive to consumers, so that consumers often discard the last few portions of cereal containing the powder-like cereal, thus resulting in wastage.

An object of the present invention is to overcome the above disadvantages.

The advantage of the present invention is that it provides a method of manufacturing packaging, which gives consumers the benefit of enjoying the fresh, crisp taste of a newly opened packet every time they consume the product. The invention also provides a method of manufacturing packaging which is relatively inexpensive yet provides the

taste and freshness benefits of an individual portion pack. Furthermore, the invention provides a method of manufacturing packaging in which the contents of the packaging remain substantially unbroken until consumption.

The invention provides a method of packaging goods as claimed in Claim 1.

The strip of sealed pouches may be arranged substantially upright or transversely in the carton. Preferably, the strip of sealed pouches is arranged in a concertina or zigzag configuration in the carton.

In providing a strip of sealed pouches, a standard serving portion of a food product, for example breakfast cereal, of typically 25g or 30g, is provided and therefore the crisp and fresh taste of a newly opened packet can be enjoyed every time the cereal is consumed since breaking the seal of one pouch does not affect the integrity of the remaining pouches in the strip.

The packaged goods made according to the present invention provide a less expensive means of providing individual portions of a food product than that of the previously mentioned portion packs. Since the food product contained within a pouch remains fresh, there is little wastage of stale food products and the product has an extended shelf life. It also avoids the time difficulty in trying to carefully re-seal and close the carton in order to maintain integrity of the food product once the carton has been opened. It also provides a more hygienic method of serving food other than of sharing a large carton. Furthermore, it avoids the problem of attracting pests such as ants and mice to an open packet of food. Furthermore, providing individual portions of the food product makes it easier for calorie control and portion control for dieters. Packaging the food in individual pouches also reduces the risk of damage to particularly brittle food-stuffs, such as crisp cereal flakes, since the packaging and layer of air within each pouch and between each pouch has a cushioning effect, thus reducing the likelihood of breakage.

The method of packaging goods according to the present invention provides a relatively low cost of manufacture since the strip of pouches can easily be folded concertina-fashion into a typical existing carton which avoids the need to re-tool carton making machines. The method utilises established and proven materials. Further, the cartons can be varied in width, height and depth to provide different sizes giving a large shelf presence in retail outlets for promotional purposes etc. The method provides for different pack sizes to be produced on one machine, for example 8 pouches, 10, 16 or 20 pouch packets.

Furthermore, the method of packaging goods according to the present invention provides the option of combining different food products in a single carton.

Preferred embodiments of the present invention will now be described with reference to the accompanying drawings, wherein:

Figure 1 shows in a diagrammatic perspective view an initial step of forming a tube;

Figure 2 shows in a view similar to Figure 1 the steps of filling, sealing and perforating pouches formed in the tube;

Figure 3 shows in an enlarged perspective view the combined pouch perforating and severing tool of Figure 2;

Figure 4 shows a strip of pouches arranged in a zigzag manner across the width of the carton;

Figure 5 shows two strips of pouches arranged in a zigzag manner across the depth of the carton;

Figure 6 shows two strips of pouches arranged in a zigzag manner across the width of the carton;

Figure 7 shows the strip of pouches of Figure 5 joined side by side;

Figure 8 shows a strip of pouches arranged in a zigzag manner along the height of the carton;

Figure 9 shows two strips of pouches arranged in a zigzag manner along the height of the carton and

Figure 10 shows two strips of pouches arranged substantially vertically in the carton.

In Figure 1 a sheet of plastics material 1 is wrapped around a cylindrical former 200 so that two longitudinal edges 201 of the plastics material overlap to form a tube 1¹.

Although Figure 1 shows a tube of circular cross-section, the tube may have any other suitable cross-section such as a square or rectangular cross-section. The overlapping longitudinal edges 201 are then heat-sealed by means of a heated seam former 202 to form a central longitudinal seam 2. The base of the tube 1¹ is then sealed by means of heated sealing jaws 203 (See Figure 2). Two heated sealing jaws 203 move from opposite sides of the tube 1¹ towards the centre of the tube until they both contact the plastics material of the tube 1¹. A seal 3, which is transverse to and overlaps the longitudinal seam 2, is thus formed. At the same time as the sealing jaws 203 are moving towards the centre of the tube, opposed pleat formers (not shown) move in a transverse direction to the sealing jaws 203 (in the direction of the arrows 4¹), also towards the centre of the tube 1¹. The pleat formers provide tucks in the side of the tube 1¹ so as to form diametrically-opposed pleats 4. The tube 1¹ is then filled with food-stuff 204 to be packaged. The food-stuff 204 is simply dropped into the tube 1¹ from above. As the food-stuff 204 is being dropped into the tube 1¹, the tube 1¹ is moved downwards with respect to the sealing jaws 203 and when the desired quantity of the food-stuff 204 has been dropped into the tube 1¹, the sealing jaws 203 and pleat formers move once again towards the centre of the tube 1¹ to simultaneously seal the tube 1¹ and form tucks at a pre-determined distance from the sealed base so as to form a "brick-shaped" pouch 5. This "brick-shaped" form is particularly space-efficient. The further seal 3 will commonly form the top seal of the pouch 5 and the base seal of a second pouch 5a. The volume of air in each pouch is determined by the pouch dimensions, which are calculated so as to be sufficient for the pouch to contain the desired quantity of food-stuff, as well as a quantity of air to protect the food-stuff. This is particularly important for delicate food-stuffs, such as cereal flakes.

The main bodies of the pouches 5 and 5a are substantially rectangular in cross-section. The pouches 5 and 5a are substantially the same size as one another. To allow separation of the pouches 5 and 5a at a later stage perforations 6 are made in the common seal 3. The perforations 6 are introduced into the common seal by means of a

comb-type cutter 205, which is located in one of the sealing jaws 203. The comb-type cutter 205 is illustrated in greater detail in Figure 3.

Once the sealing jaws 203 have formed the common seal 3, the comb-type cutter 205 moves from a retracted position in the sealing jaw 203 until it meets and pierces the common seal 3 at intervals across its width. The intervals between the perforations are determined by the spacing of teeth 206 of the comb-type cutter 205. The comb-type cutter 205 then retracts to its rest position until sealing next takes place. When a desired number of pouches has been filled and sealed to form a strip 7, for example 10 pouches, the step of forming perforations 6 in the common seal 3 is replaced by a cutting step. The comb-type cutter 205 will also be used in the cutting step. As before, the comb-type cutter will move from its retracted position in the sealing jaw 203, but instead of merely piercing the common seal 3, the comb-type cutter 205 pierces right through the common seal 3 until cutting edges 207 meet the common seal 3 and two adjacent pouches are completely severed from one another. The lower of the adjacent pouches is still attached to the strip 7 of filled and sealed pouches while the upper of the adjacent pouches forms a base for a further strip of pouches.

The dimensions of the seal 3 should be such that the "brick-shaped" air-filled cushioned pouches are sealed effectively and that the strip 7 of "brick-shaped" pouches may also be folded for storage in a space-efficient and cost-efficient manner.

The strip of filled and sealed pouches 7 is then inserted into a carton 8, as shown for example in Figure 4, where the strip of pouches is arranged in a concertina or zigzag manner across the width of the carton 8 in layers, each layer having two pouches. This arrangement of the pouches in the carton 8 serves to protect the food-stuff inside the pouches against crushing by food-stuff in adjacent pouches. Alternative arrangements of the pouches are shown in Figures 5 to 10. These arrangements also serve to protect the food-stuff in the pouches, in particular against crushing. In Figure 5, for example, two strips of pouches are arranged parallel to one another and in a zigzag manner across the depth (into the page) of the carton 8 in layers, each layer having only one pouch.

Figure 6 shows two strips of pouches arranged in a zigzag manner across the width of the carton 8 in layers, each layer having only one pouch.

Figure 7 shows a similar arrangement with a double strip 9 of pouches arranged in a zigzag manner across the depth of the carton 8. The double strip 9 of pouches is formed by dividing the tube 1¹ to form two sub-tubes (not shown) attached to one another by means of a series of central joining seams 10. The two sub-tubes are then sealed and filled in a similar manner to that described with reference to Figures 2 and 3. The central joining seams 10 are arranged parallel to and are attached to a surface 11 of each pouch. The two joined strips are separable from one another by way of perforations 12 in the central joining seams 10. The perforations 12 run substantially centrally along the length of the central joining seams 10.

Figure 8 shows a single strip of pouches arranged in a zigzag manner along the height of the carton 8 in layers, each layer having two pouches. Figure 9 shows a two strips of pouches arranged along the height of the carton 8 in layers, each layer of each strip having two pouches.

Figure 10 shows a further embodiment of the invention, in which the main bodies of the pouches 5 and 5a are substantially square in cross-section, and two separate strips of pouches are arranged parallel to one another and substantially vertically in the carton 8.

A single carton 8 might also contain several strips in which the size of the pouches in the respective strips is not the same. For example, a single carton might contain strips containing small pouches for children as well as strips of larger pouches for adults.

It will be appreciated that variations of the embodiments described above are also possible. For example, in the sealing step of the manufacturing process may use adhesive as a sealing means as an alternative to heat. The tube 1¹ might be formed of waxed paper, rather than plastics.

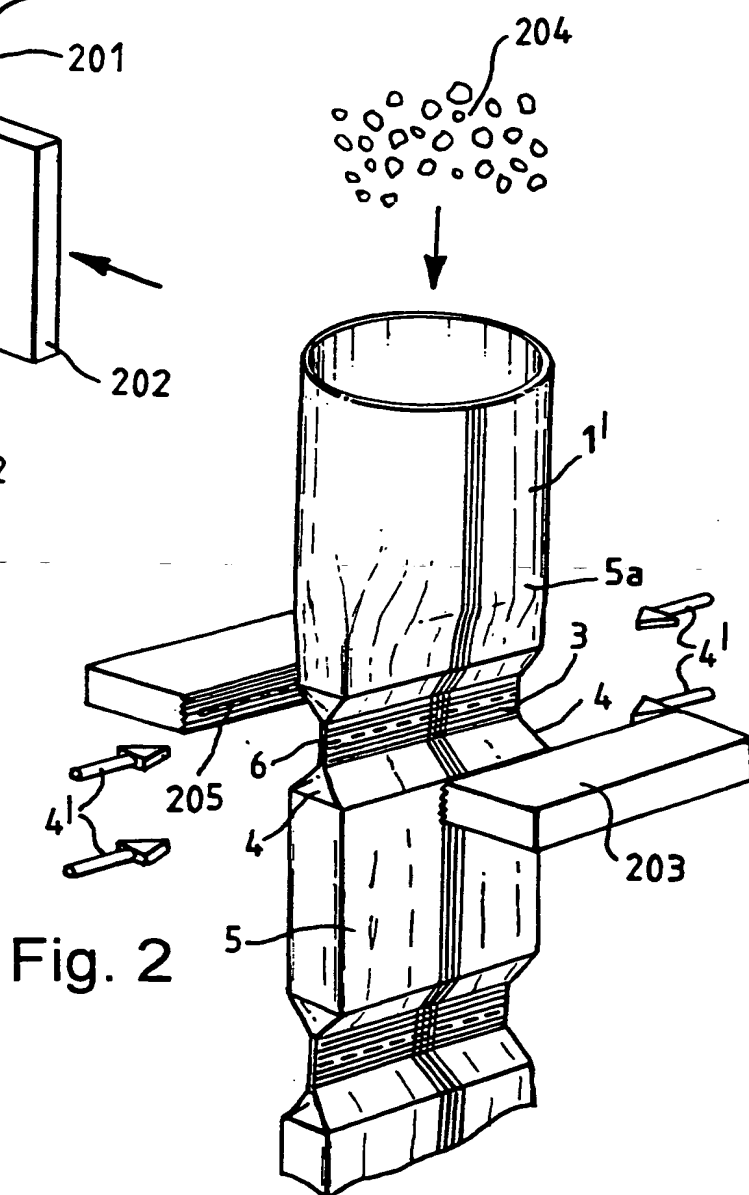
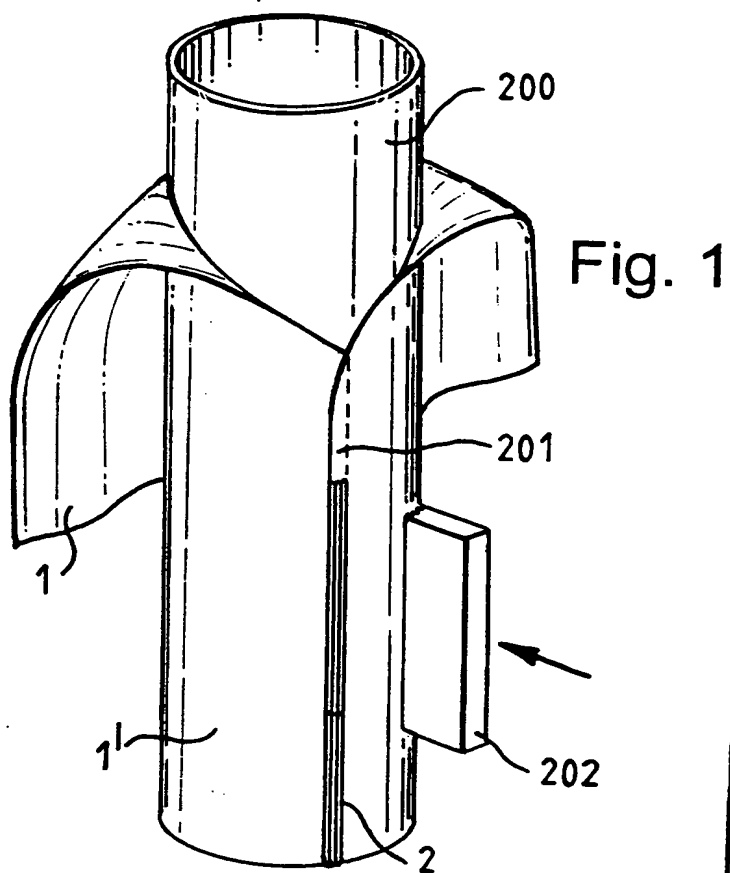
Printed matter may be applied to each pouch prior to filling each pouch with the food-stuff, e.g. information relating to the food and calorie contents, the sell-by date etc.

Claims:

1. A method of packaging goods comprising the steps of forming a tube, forming a first seal at a lower end of the tube, feeding a pre-determined amount of the goods to be packaged into the tube, forming a second seal in the tube at a pre-determined distance above the first seal, repeating the steps of feeding the goods and sealing along the tube to form a strip of sealed pouches containing the goods, inserting the strip of sealed pouches into a carton.
2. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged substantially upright or transverse in the carton.
3. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged in a concertina configuration in the carton.
4. A method as claimed in Claim 2 or 3, wherein at least two strips of sealed pouches are arranged in the carton.
5. A method as claimed in Claim 4, wherein the at least two strips of sealed pouches are arranged parallel to one another in the carton.
6. A method as claimed in Claim 4 or Claim 5, wherein the at least two strips of sealed pouches are releasably attached to one another.
7. A method as claimed in any one of the preceding claims, wherein at least one pleat is formed in the tube so that the pouches are expandable.
8. A method as claimed in Claim 7, wherein the at least one pleat is formed in each pouch after the lower end of each pouch is sealed but before the goods are fed into the pouch.

9. A method as claimed in any one of the preceding claims, wherein the pouches in the or each strip are substantially the same size.
10. A method as claimed in any one of the preceding claims, wherein each pouch is substantially cuboidal in shape.
11. A method as claimed in Claim 10, wherein each pouch is substantially cubic in shape.
12. A method as claimed in any one of the preceding claims, wherein the sealing is by means of heat.
13. A method as claimed in any one of the preceding claims, wherein the sealing is by means of an adhesive.
14. A method as claimed in any one of the preceding claims, wherein the tube is formed of plastics material.
15. A method as claimed in any one of Claims 1 to 13, wherein the tube is formed of waxed paper.
16. A method as claimed in any one of the preceding claims, wherein printed matter is applied to each pouch of the strip of pouches.
17. A method as claimed in any one of the preceding claims, wherein perforations are formed between each pouch of the strip of pouches to enable separation of the pouches from one another.
18. A method as claimed in Claim 17, wherein the perforations are formed by means of a comb-type cutter.

19. A method as claimed in Claim 18, wherein the comb-type cutter has means for severing the pouches from one another.
20. A method as claimed in Claim 19, wherein the pouches are severed from one another after a pre-determined number of pouches has been filled and sealed.
21. A method of packaging goods substantially as herein described with reference to any one of the embodiments shown in the accompanying drawings.
22. Packaged goods produced by the method as claimed in any one of the preceding claims.



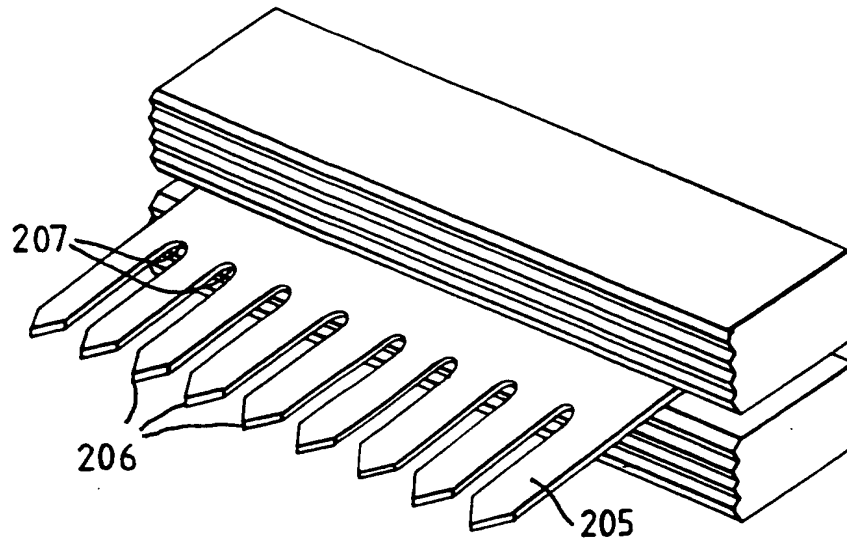


Fig. 3

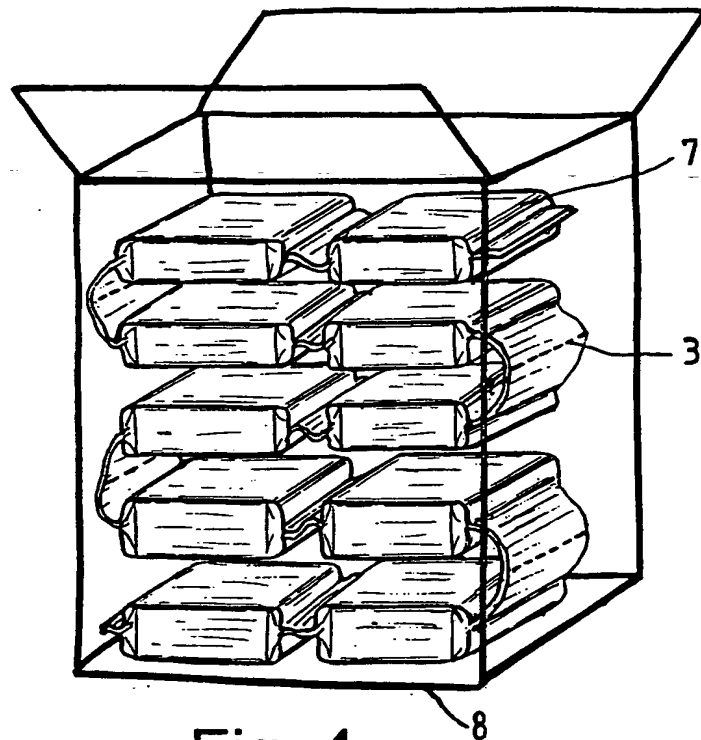


Fig. 4

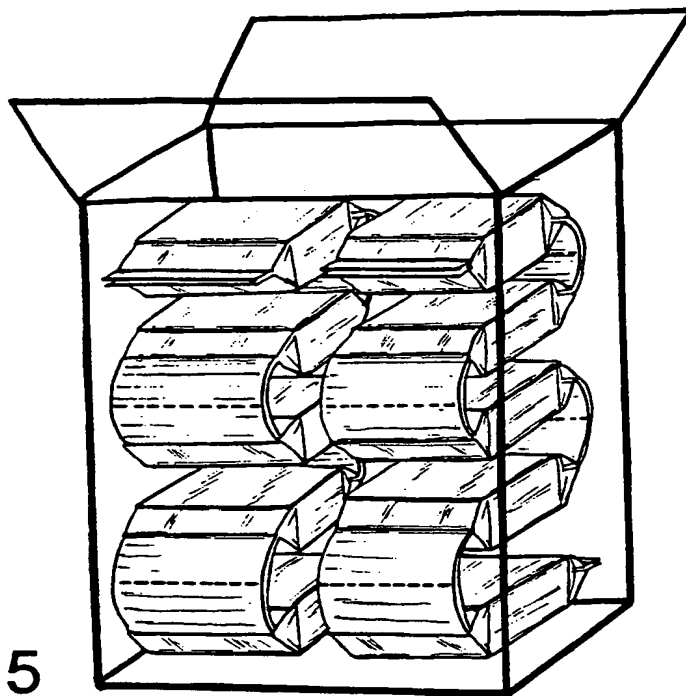


Fig. 5

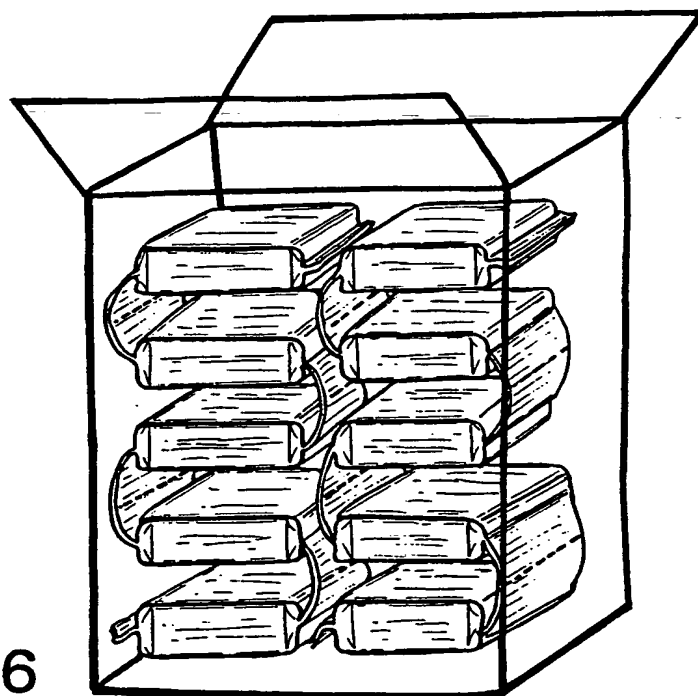


Fig. 6

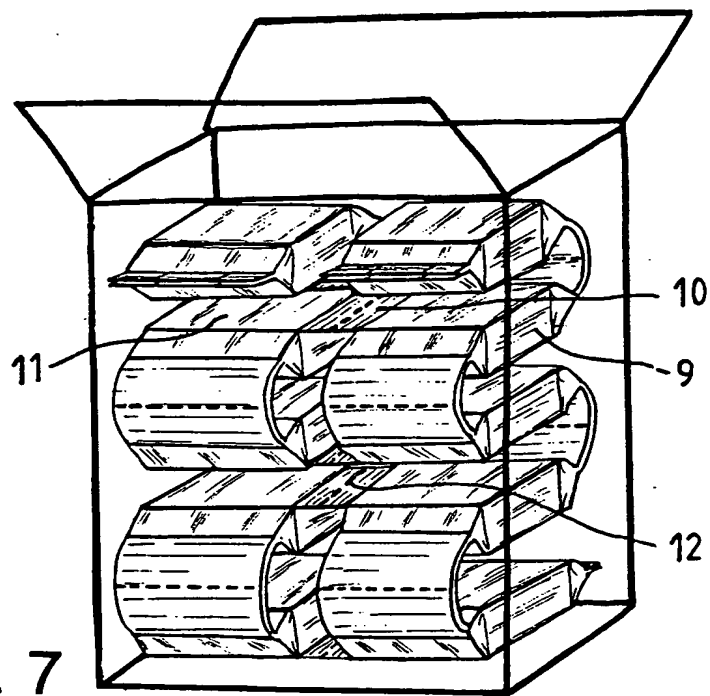


Fig. 7

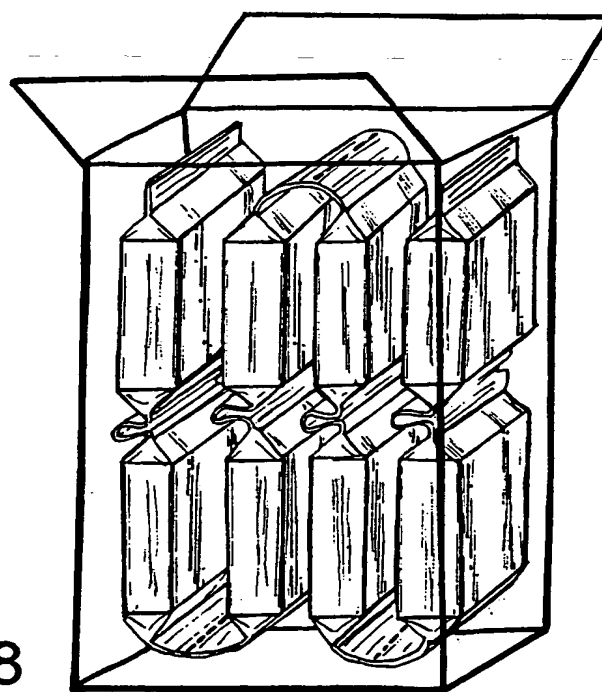


Fig. 8

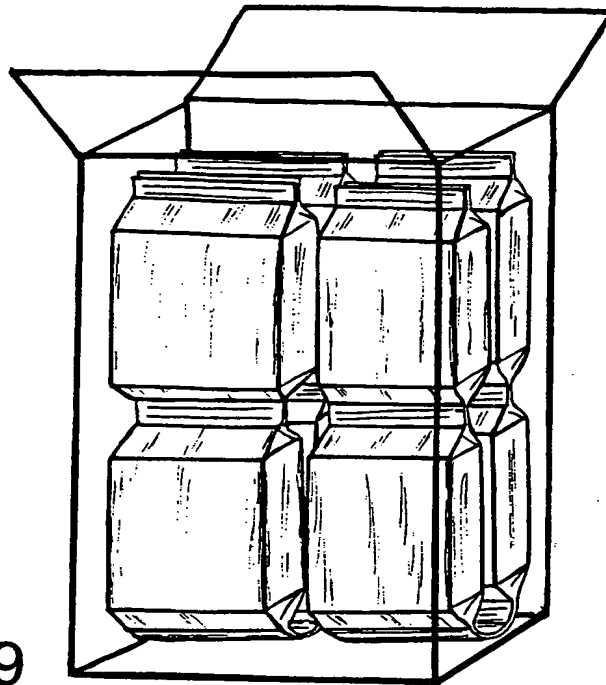


Fig. 9

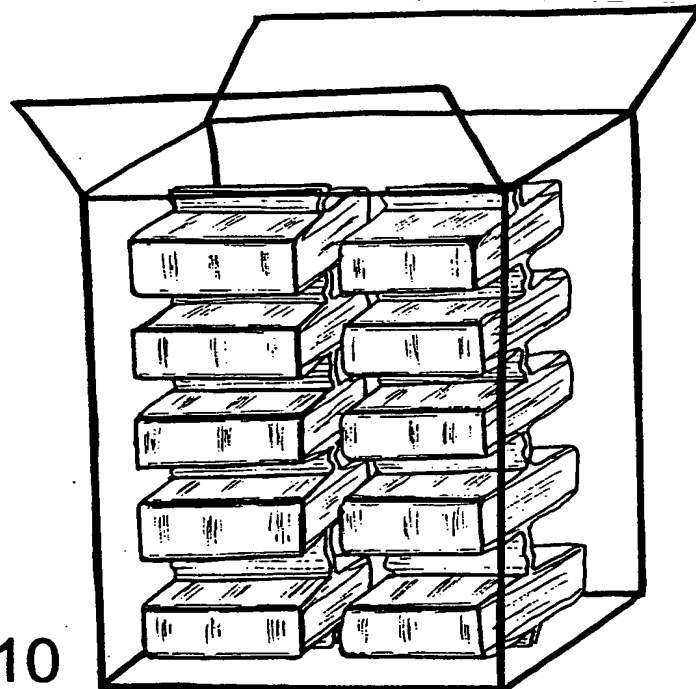


Fig. 10

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/G...00/02098

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65B9/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A Y	FR 2 658 785 A (SZILAGYI) 30 August 1991 (1991-08-30) the whole document	1, 3, 12, 22 20 7-11, 13-18
A Y	FR 2 646 140 A (ROUVRAIS) 26 October 1990 (1990-10-26) the whole document	1 14
Y	US 4 442 656 A (WYLIE) 17 April 1984 (1984-04-17) the whole document	7-11
Y	US 4 045 946 A (SCHAEFER) 6 September 1977 (1977-09-06) column 6, paragraph 4 -column 7, paragraph 2; figures 7,8	13
	-/-	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

31 August 2000

Date of mailing of the international search report

03 10. 2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Claeys, H

INTERNATIONAL SEARCH REPORT

Int. Application No.
PCT/G...00/02098

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 220 771 A (BURNS) 22 June 1993 (1993-06-22) column 1, paragraph 2 ----	15
Y	US 4 018 029 A (HAYSEN) 19 April 1977 (1977-04-19) abstract column 3, paragraph 4 -column 5, paragraph 3; figures 3-6 ----	16
Y	WO 95 21092 A (WATKINS) 10 August 1995 (1995-08-10) page 7, paragraph 2 -page 9, paragraph 1; figures 1-3 ----	17,18
A	US 4 793 118 A (FERAG) 27 December 1988 (1988-12-27) abstract -----	1

INTERNATIONAL SEARCH REPORT

Informatic patent family members

Int. Application No

PCT/GS 00/02098

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
FR 2658785	A	30-08-1991	NONE		
FR 2646140	A	26-10-1990	NONE		
US 4442656	A	17-04-1984	NONE		
US 4045946	A	06-09-1977	US	3982374 A	28-09-1976
			CA	1052333 A	10-04-1979
			DE	2529024 A	22-01-1976
			FR	2276987 A	30-01-1976
			GB	1506036 A	05-04-1978
			IT	1040768 B	20-12-1979
			JP	51056392 A	18-05-1976
US 5220771	A	22-06-1993	NONE		
US 4018029	A	19-04-1977	DE	2645299 A	14-04-1977
			GB	1534742 A	06-12-1978
			IT	1089951 B	18-06-1985
WO 9521092	A	10-08-1995	AT	175164 T	15-01-1999
			AU	1542495 A	21-08-1995
			CA	2182189 A	10-08-1995
			DE	69507015 D	11-02-1999
			DE	69507015 T	15-07-1999
			EP	0749388 A	27-12-1996
			JP	9511201 T	11-11-1997
			US	5937614 A	17-08-1999
US 4793118	A	27-12-1988	CH	671003 A	31-07-1989
			DE	3786499 A	19-08-1993
			EP	0253960 A	27-01-1988
			JP	2681049 B	19-11-1997
			JP	63037084 A	17-02-1988

WD 00/73149

PCT/GB00/02098

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REPLACED BY
ART 34 AMDTClaims:

1. A method of packaging goods comprising the steps of forming a tube, forming a first seal at a lower end of the tube, feeding a pre-determined amount of the goods to be packaged into the tube, forming a second seal in the tube at a pre-determined distance above the first seal, repeating the steps of feeding the goods and sealing along the tube to form a strip of sealed pouches containing the goods, inserting the strip of sealed pouches into a carton.
2. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged substantially upright or transverse in the carton.
3. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged in a concertina configuration in the carton.
4. A method as claimed in Claim 2 or 3, wherein at least two strips of sealed pouches are arranged in the carton.
5. A method as claimed in Claim 4, wherein the at least two strips of sealed pouches are arranged parallel to one another in the carton.
6. A method as claimed in Claim 4 or Claim 5, wherein the at least two strips of sealed pouches are releasably attached to one another.
7. A method as claimed in any one of the preceding claims, wherein at least one pleat is formed in the tube so that the pouches are expandable.
8. A method as claimed in Claim 7, wherein the at least one pleat is formed in each pouch after the lower end of each pouch is sealed but before the goods are fed into the pouch.

WO 00/73149

PCT/GB00/02098

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9. A method as claimed in any one of the preceding claims, wherein the pouches in the or each strip are substantially the same size.
10. A method as claimed in any one of the preceding claims, wherein each pouch is substantially cuboidal in shape.
11. A method as claimed in Claim 10, wherein each pouch is substantially cubic in shape.
12. A method as claimed in any one of the preceding claims, wherein the sealing is by means of heat.
13. A method as claimed in any one of the preceding claims, wherein the sealing is by means of an adhesive.
14. A method as claimed in any one of the preceding claims, wherein the tube is formed of plastics material.
15. A method as claimed in any one of Claims 1 to 13, wherein the tube is formed of waxed paper.
16. A method as claimed in any one of the preceding claims, wherein printed matter is applied to each pouch of the strip of pouches.
17. A method as claimed in any one of the preceding claims, wherein perforations are formed between each pouch of the strip of pouches to enable separation of the pouches from one another.
18. A method as claimed in Claim 17, wherein the perforations are formed by means of a comb-type cutter.

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PCT/GB00/02098

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19. A method as claimed in Claim 18, wherein the comb-type cutter has means for severing the pouches from one another.
20. A method as claimed in Claim 19, wherein the pouches are severed from one another after a pre-determined number of pouches has been filled and sealed.
21. A method of packaging goods substantially as herein described with reference to any one of the embodiments shown in the accompanying drawings.
22. Packaged goods produced by the method as claimed in any one of the preceding claims.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/02098

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B65B9/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65B

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Y	US 4 442 656 A (WYLIE) 17 April 1984 (1984-04-17) the whole document	13
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	-/-	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

31 August 2000

Date of mailing of the international search report

03 10. 2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Claeys, H

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 00/02098

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 220 771 A (BURNS) 22 June 1993 (1993-06-22) column 1, paragraph 2 ---	15
Y	US 4 018 029 A (HAYSEN) 19 April 1977 (1977-04-19) abstract column 3, paragraph 4 -column 5, paragraph 3; figures 3-6 ---	16
Y	WO 95 21092 A (WATKINS) 10 August 1995 (1995-08-10) page 7, paragraph 2 -page 9, paragraph 1; figures 1-3 ---	17,18
A	US 4 793 118 A (FERAG) 27 December 1988 (1988-12-27) abstract ---	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 00/02098

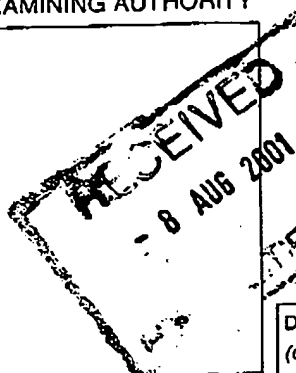
Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2658785	A	30-08-1991	NONE	
FR 2646140	A	26-10-1990	NONE	
US 4442656	A	17-04-1984	NONE	
US 4045946	A	06-09-1977	US 3982374 A	28-09-1976
			CA 1052333 A	10-04-1979
			DE 2529024 A	22-01-1976
			FR 2276987 A	30-01-1976
			GB 1506036 A	05-04-1978
			IT 1040768 B	20-12-1979
			JP 51056392 A	18-05-1976
US 5220771	A	22-06-1993	NONE	
US 4018029	A	19-04-1977	DE 2645299 A	14-04-1977
			GB 1534742 A	06-12-1978
			IT 1089951 B	18-06-1985
WO 9521092	A	10-08-1995	AT 175164 T	15-01-1999
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			CA 2182189 A	10-08-1995
			DE 69507015 D	11-02-1999
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			EP 0749388 A	27-12-1996
			JP 9511201 T	11-11-1997
			US 5937614 A	17-08-1999
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			DE 3786499 A	19-08-1993
			EP 0253960 A	27-01-1988
			JP 2681049 B	19-11-1997
			JP 63037084 A	17-02-1988

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

DEVONS, David J.
MARKS & CLERK
57-60 Lincoln's Inn Fields
London WC2A 3LS
GRANDE BRETAGNE



NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)

Date of mailing
(day/month/year) 06.08.2001

Applicant's or agent's file reference
WPP80410

IMPORTANT NOTIFICATION

International application No.
PCT/GB00/02098

International filing date (day/month/year)
01/06/2000

Priority date (day/month/year)
01/06/1999

Applicant
LAITT, Andrew

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/

 European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized officer

Berger, K

Tel. +49 89 2399-2576




INTERNATIONAL COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference WPP80410		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/02098	International filing date (day/month/year) 01/06/2000	Priority date (day/month/year) 01/06/1999	
International Patent Classification (IPC) or national classification and IPC B65B9/20			
Applicant LAITT, Andrew			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 3 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input checked="" type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application 			
Date of submission of the demand 29/12/2000		Date of completion of this report 06.08.2001	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer Janosch, J Telephone No. +49 89 2399 7525	



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB00/02098

I. Basis of the report

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*)
Description, pages:

1-7 as originally filed

Claims, No.:

1-22 as amended under Article 19

Drawings, sheets:

1/5-5/5 as originally filed

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB00/02098

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 1-22.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 22 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 1-21.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/02098

Re Item III**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The feature "the pouch dimensions are calculated such that each pouch can contain the desired quantity of food-stuff, as well as sufficient air to protect the food-stuff by cushioning" is an essential feature of claim 1. Since it was introduced, according to Art. 19 PCT, after the search report was established and since this feature was not covered by the originally filed claims, which were the basis for the search report, this feature was not taken into consideration by the ISA when establishing the International Search Report. Consequently claim 1 cannot be examined since it has not been searched (Rule 66.1 (e) PCT).

This is likewise relevant for claims 2-21, since these claims depend on claim 1.

2. Claim 22 is not clear in the sens of Art. 6 PCT, since the packaged brittle food-stuff is exclusively defined by method steps. Structural features are not used to define the subject-matter of claim 22.

Re Item VII**Certain defects in the international application**

1. Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
2. The features of the claims 1-22 are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

29-12-2000

09/980084

JC10 Rec'd PGT/PTO 3 0 NOV 2001

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Claims:

1. A method of packaging a brittle food-stuff comprising the steps of forming a tube, forming a first seal at a lower end of the tube, feeding a pre-determined amount of the food-stuff to be packaged into the tube, forming a second seal in the tube at a pre-determined distance above the first seal, repeating the steps of feeding the food-stuff and sealing along the tube to form a strip of sealed pouches of pre-determined dimensions containing the food-stuff and inserting the strip of sealed pouches into a carton, wherein the pouch dimensions are calculated such that each pouch can contain the desired quantity of food-stuff, as well as sufficient air to protect the food-stuff by cushioning.
2. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged substantially upright or transverse in the carton.
3. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged in a concertina configuration in the carton.
4. A method as claimed in Claim 2 or 3, wherein at least two strips of sealed pouches are arranged in the carton.
5. A method as claimed in Claim 4, wherein the at least two strips of sealed pouches are arranged parallel to one another in the carton.
6. A method as claimed in Claim 4 or Claim 5, wherein the at least two strips of sealed pouches are releasably attached to one another.
7. A method as claimed in any one of the preceding claims, wherein at least one pleat is formed in the tube so that the pouches are expandable.

29-12-2000

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8. A method as claimed in Claim 7, wherein the at least one pleat is formed in each pouch after the lower end of each pouch is sealed but before the goods are fed into the pouch.
9. A method as claimed in any one of the preceding claims, wherein the pouches in the or each strip are substantially the same size.
10. A method as claimed in any one of the preceding claims, wherein each pouch is substantially cuboidal in shape.
11. A method as claimed in Claim 10, wherein each pouch is substantially cubic in shape.
12. A method as claimed in any one of the preceding claims, wherein the sealing is by means of heat.
13. A method as claimed in any one of the preceding claims, wherein the sealing is by means of an adhesive.
14. A method as claimed in any one of the preceding claims, wherein the tube is formed of plastics material.
15. A method as claimed in any one of Claims 1 to 13, wherein the tube is formed of waxed paper.
16. A method as claimed in any one of the preceding claims, wherein printed matter is applied to each pouch of the strip of pouches.
17. A method as claimed in any one of the preceding claims, wherein perforations are formed between each pouch of the strip of pouches to enable separation of the pouches from one another.

18. A method as claimed in Claim 17, wherein the perforations are formed by means of a comb-type cutter.
19. A method as claimed in Claim 18, wherein the comb-type cutter has means for severing the pouches from one another.
20. A method as claimed in Claim 19, wherein the pouches are severed from one another after a pre-determined number of pouches has been filled and sealed.
21. A method of packaging brittle food-stuff substantially as herein described with reference to any one of the embodiments shown in the accompanying drawings.
22. Packaged brittle food-stuff produced by the method as claimed in any one of the preceding claims.

Claims:

1. A method of packaging a brittle food-stuff comprising the steps of forming a tube, forming a first seal at a lower end of the tube, feeding a pre-determined amount of the food-stuff to be packaged into the tube, forming a second seal in the tube at a pre-determined distance above the first seal, repeating the steps of feeding the food-stuff and sealing along the tube to form a strip of sealed pouches of pre-determined dimensions containing the food-stuff and inserting the strip of sealed pouches into a carton, wherein the pouch dimensions are calculated such that each pouch can contain the desired quantity of food-stuff, as well as sufficient air to protect the food-stuff by cushioning.
2. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged substantially upright or transverse in the carton.
3. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged in a concertina configuration in the carton.
4. A method as claimed in Claim 2 or 3, wherein at least two strips of sealed pouches are arranged in the carton.
5. A method as claimed in Claim 4, wherein the at least two strips of sealed pouches are arranged parallel to one another in the carton.
6. A method as claimed in Claim 4 or Claim 5, wherein the at least two strips of sealed pouches are releasably attached to one another.
7. A method as claimed in any one of the preceding claims, wherein at least one pleat is formed in the tube so that the pouches are expandable.

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8. A method as claimed in Claim 7, wherein the at least one pleat is formed in each pouch after the lower end of each pouch is sealed but before the goods are fed into the pouch.
9. A method as claimed in any one of the preceding claims, wherein the pouches in the or each strip are substantially the same size.
10. A method as claimed in any one of the preceding claims, wherein each pouch is substantially cuboidal in shape.
11. A method as claimed in Claim 10, wherein each pouch is substantially cubic in shape.
12. A method as claimed in any one of the preceding claims, wherein the sealing is by means of heat.
13. A method as claimed in any one of the preceding claims, wherein the sealing is by means of an adhesive.
14. A method as claimed in any one of the preceding claims, wherein the tube is formed of plastics material.
15. A method as claimed in any one of Claims 1 to 13, wherein the tube is formed of waxed paper.
16. A method as claimed in any one of the preceding claims, wherein printed matter is applied to each pouch of the strip of pouches.
17. A method as claimed in any one of the preceding claims, wherein perforations are formed between each pouch of the strip of pouches to enable separation of the pouches from one another.

18. A method as claimed in Claim 17, wherein the perforations are formed by means of a comb-type cutter.
19. A method as claimed in Claim 18, wherein the comb-type cutter has means for severing the pouches from one another.
20. A method as claimed in Claim 19, wherein the pouches are severed from one another after a pre-determined number of pouches has been filled and sealed.
21. A method of packaging brittle food-stuff substantially as herein described with reference to any one of the embodiments shown in the accompanying drawings.
22. Packaged brittle food-stuff produced by the method as claimed in any one of the preceding claims.

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/73149 A1

(51) International Patent Classification⁷: **B65B 9/20**

(21) International Application Number: **PCT/GB00/02098**

(22) International Filing Date: **1 June 2000 (01.06.2000)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
9912719.3 1 June 1999 (01.06.1999) GB

(71) Applicant and

(72) Inventor: **LAITT, Andrew [GB/GB]; 22 Dempster Road,
London SW18 1AT (GB).**

(74) Agent: **DEVONS, David, Jon; Marks & Clerk, 57-60 Lin-
coln's Inn Fields, London WC2A 3LS (GB).**

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

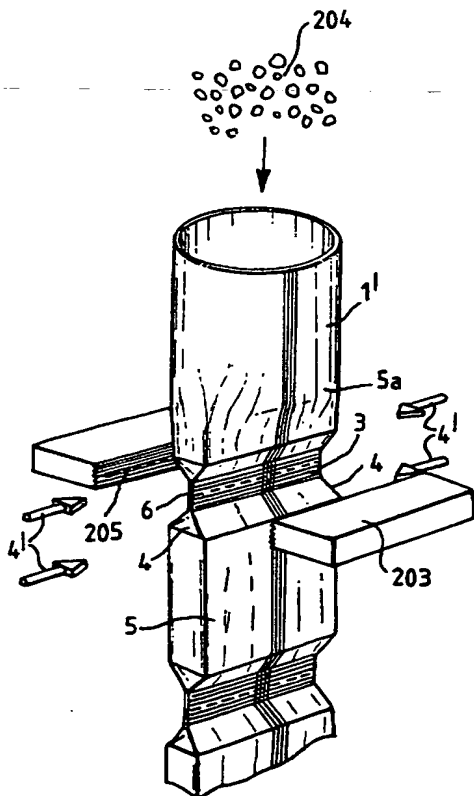
- With international search report.
- With amended claims.

Date of publication of the amended claims: 15 February 2001

[Continued on next page]

(54) Title: **A METHOD OF PACKAGING GOODS**

(57) Abstract: A method of packaging goods comprises the steps of forming a tube (1¹), forming a first seal (3) at a lower end of the tube (1¹), feeding a pre-determined amount of the goods to be packaged (204) into the tube (1¹), forming a second seal in the tube (1¹) at a pre-determined distance above the first seal (3), repeating the steps of feeding the goods and sealing along the tube (1¹) to form a strip of sealed pouches (7) containing the goods (204) and inserting the strip of sealed pouches (7) into a carton (8).



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WS 00/73149 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

AMENDED CLAIMS

[received by the International Bureau on 4 December 2000 (04.12.00);
original claims 1, 21 and 22 amended; remaining claims unchanged (3 pages)]

1. A method of packaging a brittle food-stuff comprising the steps of forming a tube, forming a first seal at a lower end of the tube, feeding a pre-determined amount of the food-stuff to be packaged into the tube, forming a second seal in the tube at a pre-determined distance above the first seal, repeating the steps of feeding the food-stuff and sealing along the tube to form a strip of sealed pouches of pre-determined dimensions containing the food-stuff and inserting the strip of sealed pouches into a carton, wherein the pouch dimensions are calculated such that each pouch can contain the desired quantity of food-stuff, as well as sufficient air to protect the food-stuff by cushioning.
2. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged substantially upright or transverse in the carton.
3. A method as claimed in Claim 1, wherein the strip of sealed pouches is arranged in a concertina configuration in the carton.
4. A method as claimed in Claim 2 or 3, wherein at least two strips of sealed pouches are arranged in the carton.
5. A method as claimed in Claim 4, wherein the at least two strips of sealed pouches are arranged parallel to one another in the carton.
6. A method as claimed in Claim 4 or Claim 5, wherein the at least two strips of sealed pouches are releasably attached to one another.
7. A method as claimed in any one of the preceding claims, wherein at least one pleat is formed in the tube so that the pouches are expandable.

8. A method as claimed in Claim 7, wherein the at least one pleat is formed in each pouch after the lower end of each pouch is sealed but before the goods are fed into the pouch.
9. A method as claimed in any one of the preceding claims, wherein the pouches in the or each strip are substantially the same size.
10. A method as claimed in any one of the preceding claims, wherein each pouch is substantially cuboidal in shape.
11. A method as claimed in Claim 10, wherein each pouch is substantially cubic in shape.
12. A method as claimed in any one of the preceding claims, wherein the sealing is by means of heat.
13. A method as claimed in any one of the preceding claims, wherein the sealing is by means of an adhesive.
14. A method as claimed in any one of the preceding claims, wherein the tube is formed of plastics material.
15. A method as claimed in any one of Claims 1 to 13, wherein the tube is formed of waxed paper.
16. A method as claimed in any one of the preceding claims, wherein printed matter is applied to each pouch of the strip of pouches.
17. A method as claimed in any one of the preceding claims, wherein perforations are formed between each pouch of the strip of pouches to enable separation of the pouches from one another.

18. A method as claimed in Claim 17, wherein the perforations are formed by means of a comb-type cutter.
19. A method as claimed in Claim 18, wherein the comb-type cutter has means for severing the pouches from one another.
20. A method as claimed in Claim 19, wherein the pouches are severed from one another after a pre-determined number of pouches has been filled and sealed.
21. A method of packaging brittle food-stuff substantially as herein described with reference to any one of the embodiments shown in the accompanying drawings.
22. Packaged brittle food-stuff produced by the method as claimed in any one of the preceding claims.